Filing Date: July 21, 2003
Title: DISPERSING AGENTS FOR PIGMENTS OR EXTENDERS BASED ON ACRYLIC ACID ALKYL ESTER POLYMERS

IN THE CLAIMS

Page 2 of 10 Dkt: 1238.002US2

- 1. (Currently Amended) A dispersing agent for pigments or extenders comprising an acrylic ester-acrylamide polymer having a weight average molecular weight of 1,000 to 50,000 comprising an aminolysis product of an acrylic acid alkyl ester polymer with at least one amine of a formula $NH_2 R^1 Z$, wherein R^1 is a divalent alkylene radical comprising 2 4 carbon atoms and Z is a 5- or 6-membered N-containing heterocycle heteroaryl of up to 2 nitrogen atoms and optionally an oxygen and wherein, the acrylic acid alkyl ester polymer is a polymer of acrylic acid alkyl ester monomer alone, or with one or more additional monomers selected from the group consisting of itaconic acid ester, maleic acid ester, methacrylic acid ester, (meth)acrylic acid, styrene, alkyl vinyl ether, vinyl acetate, and at least part of the ester groups of the acrylic ester-acrylamide polymer are transesterified with at least one long chain alcohol selected from the group consisting of oleyl alcohol, stearyl alcohol, benzyl alcohol, methoxy polyethylene glycol, butyl triglycol and allyl polyether.
- 2. (Currently Amended) A dispersing agent of claim 1, wherein an amine selected from the group consisting of c) saturated or unsaturated aliphatic amines comprising 6 22 carbon atoms, d) alicyclic amines comprising up to 6 carbon atoms, e) aryl-substituted alkylamines, and f) polyoxyalkylene amines NH₂-R¹-(O R² -)_x O R³[[,]] wherein x is 1 to about 120, R¹ is a divalent alkylene radical comprising 2 3 carbon atoms, R² is a divalent alkylene radical comprising 2 4 carbon atoms and R³ is an alkyl radical comprising 1 4 carbon atoms, and or any combination thereof, is also used as an amine for the aminolysis product.
- 3. (Cancelled)
- 4. (Original) A dispersing agent of claim 1, wherein the alkyl radical of the acrylic acid ester contains 1 4 C-atoms.
- 5. (Original) A dispersing agent of claim 1, wherein a catalyst is used for aminolysis.

Filing Date:July 21, 2003

Title: DISPERSING AGENTS FOR PIGMENTS OR EXTENDERS BASED ON ACRYLIC ACID ALKYL ESTER POLYMERS

Page 3 of 10 Dkt: 1238.002US2

6. (Previously Presented) A dispersing agent of claim 1, wherein the acrylic ester acrylamide polymer has a weight average molecular weight of 2000 – 20,000.

- 7. (Previously Presented) A dispersing agent of claim 1, comprising a phosphoric acid, phosphoric ester, sulfonic acid or carboxylic acid salt of the acrylic ester acrylamide polymer.
- 8. (Previously Presented) A pigment concentrate comprising the dispersing agent of claim 1 homogenized together with the pigments and/or extenders, optional organic solvents and/or water, optional binder vehicles and optional lacquer adjuvant substances.
- 9. (Previously Presented) A coating medium, comprising a dispersion of the dispersing agent of claim 1 with a binder vehicle, pigments and/or extenders, and adjuvant substances, and optionally a solvent.
- 10. (Previously Presented) A process for producing a dispersing agent comprising an acrylic ester acrylamide polymer having a weight average molecular weight of 1,000 to 50,000, which process comprises aminolyzing an acrylic acid ester polymer with at least one amine, wherein the acrylic acid alkyl ester polymer is a polymer of acrylic acid alkyl ester monomer alone or with one of more additional monomers selected from the group consisting of itaconic acid ester, maleic acid ester, (meth)acrylic acid ester, (meth)acrylic acid, styrene, alkyl vinyl ether and vinyl acetate, and at least part of the ester groups of the acrylic ester-acrylamide polymer are transesterified with at least one long chain alcohol selected from the group consisting of oleyl alcohol, stearyl alcohol, benzyl alcohol, methoxy polyethylene glycol, butyl triglycol and allyl polyether and wherein the amine has a formula NH₂R¹- Z, wherein R¹ is a divalent alkylene radical comprising 2 4 carbon atoms is and Z is a 5- or 6-membered N-containing heteroeyele heteroaryl of up to 2 nitrogen atoms and optionally an oxygen.
- 11. (Currently Amended) A process for producing a dispersing agent according to claim 10, further comprising aminolyzing with an amine selected from the group consisting of c) saturated or unsaturated aliphatic amines comprising 6-22 carbon atoms, d) alicyclic amines comprising

Serial Number: 10/623,685

Filing Date:July 21, 2003

Page 4 of 10 Dkt: 1238.002US2

Title: DISPERSING AGENTS FOR PIGMENTS OR EXTENDERS BASED ON ACRYLIC ACID ALKYL ESTER POLYMERS

up to 6 carbon atoms, e) aryl-substituted alkylamines and f) polyoxyalkylene amines NH_2-R^1 - (O – R^2 -)_x - O - R^3 [[,]] wherein <u>x is 1 to about 120</u>, R^1 is a divalent alkylene radical comprising 2 - 3 carbon atoms, R^2 is a divalent alkylene radical comprising 2 - 4 carbon atoms and R^3 is an alkyl radical comprising 1 - 4 carbon atoms, and or any combination thereof.